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Notes on Mr. Alan Owston's Collection of Birds from the Islands lying between Kiushu and Formosa.

(With Descriptions of Three New Species and Three New Subspecies).

BY

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With Plates IX—XI.

In the period of May to December, 1904, that interesting chain of islands stretching between Kiushu and Formosa and including the Loochoo Islands, formed the seat of ornithological labors by the collectors expressly sent thither for the purpose by Mr. ALAN OWSTON of Yokohama. The collecting party consisted of Messrs. M. OSA and T. OSADA. The islands visited, in the order of their succession from north to south, were as follows :

1. Tanegashima. Nov. 2—Dec. 6.
2. Yakushima. Sept. 23—Nov. 1.
3. Kikaigashima, E. of Amami-Ōshima. A few days spent on the island in Sept.
4. Amami-Ōshima. Aug. 22—Sept. 10.
5. Tokunoshima. Aug. 5 ; Aug. 10—21.
6. Okino-Erabushima. Aug. 7.
7. Okinawashima. April 10—May 21 and July 17—31. During the first stay a visit was made to Kudaka, E. of Okinawashima ; and during the second, excursions were made to some other outlying islands of the Okinawa Group, viz., Iheya, Izena, Yagachi and Jamami.
8. Miyakojima. July 4—16.
9. Ishigakishima. May 23—June 14 and July 1—4.

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10. Iriomote. June 15—27. Kohama, a small island between Iriomote and Ishigaki, was visited June 30.

On some of the islands, the services of native collectors were availed of. This accounts for the facts that in some cases the dating of specimens does not agree with the time of the party's stay and that certain specimens are from islands which were not visited by the party itself, as f. i. Yonakuni. A number of specimens bear the date of Jan. 1905; they are those that were collected by native hunters after the party's departure from the islands.

The entire collection consists of 1669 well-preserved skins,—a number which speaks much to the credit of Mr. OSA and his assistant who made it. This fine collection, coming as it does from islands which ornithologically had been but little or not at all known before, is of great importance, and certainly demands a more careful and more prolonged attention than that I have been able to bestow upon it. For the present I am prevented by circumstances to improve upon this report, and so let it be given as it stands.

I have referred the specimens in the collection to 95 genera and 124 species and subspecies. As new species will be described the three, *Geocichla major* (No. 2), *Picus owstoni* (No. 59) and *Nannocnus ijimai* (No. 92); and as new subspecies will be given likewise three, viz., *Merula celænops yakushimensis* (No. 7), *Zosterops japonicus insularis* (No. 23) and *Corvus macrorhynchus osai* (No. 37). New to the avifauna of the Japanese Empire are *Merops ornatus* (No. 70) and *Spilornis pallidus* (No. 83). The sequence adopted in listing the species is that of SEEBOHM in his Birds of the Japanese Empire.

At the end of the report is appended a Table containing a list of all the species and subspecies hitherto recorded from the region, together with indications of the island or island groups on which each was obtained. In that Table the names of birds are alphabetically arranged; and these, so far as concerns the forms represented in the present OWSTON collection, are marked with the reference number of each in parenthesis, so that the table may also serve as an index to the contents of this report. The comparatively

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few names not marked as above are of those forms which are not represented in the collection but were taken before as known through the papers of STEJNEGER,[1] SEEBOHM[2] and BANGS[3] concerning the avifauna of the Loochoo (or Riukiu) Islands.

In the Table just referred to, there are listed in all 195 species and subspecies. That number I consider to represent all the forms of birds that are at present known to occur in the whole series of islands stretching between Kiushu and Formosa, including the Loochoos. Previously there have been known no less than 131 forms from the Loochoos and none at all from the more northernly situated islands in the series mentioned. The balance, viz., 64 species and subspecies, may be said to represent the forms now recorded for the first time from the region of the several islands and island groups under question.

Here I beg to express my sincere thanks to Mr. ALAN OWSTON who in the most liberal manner placed the entire collection at my disposal for examination. To Professor ISAO IJIMA I am under very deep obligation for superintending the work and for revising the manuscript. Further my thanks are due to Mr. NAMIYE for the valuable advice given me on several occasions. Finally, in the name of the owner of the collection, I beg to tender thanks to Professor MITSUKURI, to whose kind support, by furnishing the collectors with letters of recommendation to prefectural offices of the parts visited, much of the success of the expedition is due.

1. Geocichla varia (PALL.).

(Toratsugumi).

Tanegashima: One ♂ obtained Dec. 1. Completely identical with specimens from Hondō.

1) Stejneger, Proc. U.S. Nat. Mus. 1886, p. 634 and 1887, p. 391.
2) Seebohm, The Birds of the Japanese Empire.—Same in Ibis, 1893, p. 47.
3) Bangs, Bull. Mus. Comp. Zool. Harvard Coll., vol. XXXVI, No. 8, 1901; p. 255.

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2. Geocichla major, nov. sp.

(Ōtoratsugumi).

Amami-Ōshima: A number of beautiful specimens of both sexes obtained during September, November and December at several localities on the island.

Characters.—Like *G. varia*, but considerably larger, with 12 tail-feathers (instead of 14) and somewhat differently colored on the lower side. The bill is thicker, longer and more blackish than in that species; wing, tail and tarso-metatarsus longer; breast and abdomen in general dark yellow (instead of white) and with somewhat larger semicircular black spots; lower tail-coverts dirty yellowish (instead of white). The measurements are as follows:

O.C. Sp. No.	Exact locality and date.	Sex.	Length of bill along culmen.	Length of wing.	Length of tail	Length of tarso-metatarsus.
1406	Naganeyama, Sept. 7 ...	Ad. ♂.	32 mm.	160 mm.	117 mm.	38 mm.
1405	Yamadayama, Sept. 9 ...	„ „	35 „	168 „	111 „	40 „
1251	Nishi-Nakamamura, Jan. 1	„ „	34 „	162 „	123 „	42 „
1421	Asatomura, Dec. 1	„ „	35 „	162 „	119 „	40 „
1408	Tokuchiyama, Dec. 11 ...	„ „	35 „	161 „	116 „	41 „
1409	Nakaneyama, Sept. 10 ...	Ad. ♀.	32 „	164 „	122 „	38 „
1252	Asatomura, Dec. 27... ...	„ „	34 „	161 „	118 „	39 „
1410	Narikawayama, Dec. 11 ...	„ „	33 „	160 „	117 „	38 „
1411	„ Dec. 15 ...	„ „	35 „	166 „	123 „	40 „
1407	Sumiyo, Nov. 30	„ „	34 „	159 „	113 „	39 „
		Average:	33.9 mm.	162.3 mm.	117.9 mm.	39.5 mm.

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For the sake of comparison I may here give measurements of *G. varia* at may disposal.

Sci. Coll. Sp. No.	Locality (Hondō)	Sex.	L. of bill along culmen.	L. of wing.	L. of tail.	L. of tarso-metatarsus.
4	Prov. Musashi	Ad. ♂	30 mm.	150 mm.	96 mm.	32 mm.
771	„ Sagami	„ „	31 „	154 „	105 „	33 „
770	Toda	„ „	33 „	158 „	108 „	34 „
1518	Prov. Musashi	„ „	31 „	159 „	101 „	32 „
2398	„ „	„ „	31 „	151 „	92 „	—
769	„ Shimosa...	„ „	33 „	161 „	99 „	34 „
773	„ Musashi	„ „	—	158 „	101 „	31 „
772	„ Kōtsuke	„ ?	33 „	154 „	102 „	33 „
		Average:	31.7 mm.	154.4 mm.	100.5 mm.	32.7 mm.

3. Merula fuscata (Pall.).
(Tsugumi).

Tanegashima: A single ♂ captured Nov. 26.

4. Merula pallida (Gm.).
(Shirohara).

Tanegashima: 8 specimens, both ♂ and ♀, obtained in the end of November and the beginning of December.

Yakushima: 2 ♀ specimens, Nov. 28 and 29.

Amami-Ōshima: 7 specimens (♂ & ♀) obtained during Dec. 1904. and Jan. 1905 at several spots on the island.

Okinawashima: 3 ♀ specimens obtained April 14 and 16 in the town of Shuri.

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5. Merula chrysolaus (T.).

(Akahara).

Tanegashima: 5 ♀ specimens collected during Nov. and Dec.
Okinawashima: A ♂ and a ♀ obtained April 13 and 16 in Shuri.

6. Merula obscura (Gm.).

(Mami-chajinai).

Tanegashima: A single ♀, dated Yoshidamura Nov. 5.

7. Merula celænops yakushimensis, subsp. nov.

(Yakushima-akakokko).

Yakushima: 4 ♂ and 3 ♀ specimens, all adults, collected October 18—21 on the mountain called Miyanouradake at an attitude of 1666—2000 m.

Characters.—Like *M. celænops* (Stejn.) from the Seven Islands of Izu, but somewhat larger on the average and generally darker in the color of plumage.

The males have the upper bill nearly black and the lower bill dark; whereas in the species from the Seven Islands these parts are respectively dark and yellowish. The black of the head is deeper and the chestnut-red of the breast and abdomen is of a somewhat more intense tone. The females are very much like those of *M. celænops*, differing only in the slightly darker tone of the color of plumage.

I believe the form in question deserves to be regarded to be at least subspecifically distinct from the typical *M. celænops*. The measurements are as follows:

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M. celænops yakushimensis, ♂

O. C. Sp. No.	Date.	Sex.	L. of culmen.	L. of wing.	L. of tail.	L. of tarso-metatarsus.
1258	Oct. 18, 1904	Ad. ♂	25 mm.	124 mm.	94 mm.	34 mm.
1255	„ 16, „	„ „	27 „	124 „	93 „	33 „
1259	„ 19, „	„ „	26 „	124 „	96 „	33 „
1257	„ 21, „	„ „	37 „	126 „	96 „	34 „
		In average :	28,75 mm.	124.5 mm.	94.75 mm.	33.5 mm.

M. celænops yakushimensis, ♀

1260	Oct. 18, 1904.	Ad. ♀	36 mm.	118 mm.	93 mm.	32 mm.
1254	„ 16, „	„ „	26 „	112 „	82 „	31 „
1256	„ 19, „	„ „	27 „	121 „	94 „	34 „
		In average :	29.7 mm.	117 mm.	89.7 mm.	32.3 mm.

For the sake of comparison I append the measurements of typical *M. celænops* from Hachijō, one of the Seven Islands of Izu.

Adult male specimens.

O. C. Sp. No.						
1	March 13, 1895	Ad. ♂	25 mm.	124 mm.	93 mm.	32 mm.
2	„ „ „	„ „	25 „	118 „	91 „	32 „
3	„ „ „	„ „	27 „	112 „	83 „	34 „
4	„ „ 1894	„ „	23 „	119 „	92 „	32 „
5	Oct. 19, 1893	„ „	24 „	118 „	89 „	31 „
6	March 13, 1895	„ „	25 „	119 „	88 „	33 „
		In average :	24.8 mm	118.3 mm.	89.3 mm.	32.3 mm.

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Adult female specimens.

10	March 13, 1895.	Ad. ♀	25 mm.	110 mm.	80 mm.	32 mm.
7	„ „ „	„ „	26 mm.	115 „	82 mm.	34 „
8	„ „ „	„ „	25 mm.	112 „	82 mm.	32 „
9	„ „ „	„ „	24 mm.	114 „	87 mm.	32 „
		In average :	25 mm.	112.7 mm.	82.7 mm.	32.5 mm.

8. Icoturus akahige (T.).

(Komadori).

Yakushima : 13 specimens, including both sexes, collected during September, November and December.

9. Icoturus namiyei Stejn.

(Namiye-akahige).

Okinoshima : 3 adult females and 1 young male obtained in the early part of May on Nagodake and Onnadake and in Ijimura.

10. Icoturus komadori (T.).

(Akahige.)

Amami-Ōshima : Several specimens of both sexes, obtained during November and December.

Tokunoshima : A ♂ and a ♀ captured in bamboo-bush, August 11 and 13.

11. Melodes calliope (Pall.).

(Nogoma.)

Tanegashima : A single ♂ captured in a bush near Masuda, November 12.

Yakushima : 8 males and 1 female, obtained during November and December.

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12. Monticola solitaria (MÜLL.).

(Isohiyodori).

Tanegashima: 13 specimens (♂ & ♀), collected in November and December.

Yakushima: 3 specimens, in the latter part of October.

Amami-Ōshima: Numerous specimens, during October, November and December.

Kikaigashima: 2 males, in September in Kawaminemura.

Tokunoshima: 2 females, August 13 and 14 near Sanmura on the sea-coast.

Yagachi: 2 males and 2 females, end of April.

Okinawashima: Numerous specimens obtained during April, May, June and August at several localities on the island.

13. Cinclus pallasi (T.).

(Kawagarasu).

Yakushima: 2 males, dated October 11 and 29.

14. Pratincola maura (PALL.).

(Nobitaki).

Tanegashima: A single ♀, obtained Nov. 11, at Neruta.

Yakushima: 2 ♂ specimens, shot Oct. 29 at Minatomura.

15. Ruticilla aurorea (GM.).

(Jōbitaki).

Tanegashima: 16 specimens collected during November.

Yakushima: 17 specimens collected during October, November and December.

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16. Tarsiger cyanurus (PALL.).

(Ruribitaki.)

Tanegashima : 19 specimens obtained in November and December.

Yakushima : 2 ♀ and 1 ♂ specimens in November and December.

Amami-Ōshima : 1 ♀ and 2 ♂ specimens in November and December.

17. Poliomyias luteola (PALL.).

(Mugimaki).

Tanegashima : 1 adult and 1 young males obtained Nov. 15 at Kami-satomura.

18. Xanthopygia narcissina (T.).

(Kibitaki).

Tanegashima : A ♀ shot in a wood near Yoshida, Nov. 9.

Yakushima : 17 ♂ and 35 ♀ specimens collected during Sept., Oct. and Nov.; a part of them on the mountain Miyanouratake, about 1833 m. high above the sea-level.

Amami-Ōshima : Many specimens obtained in Sept. and Nov.

Okinawashima : A single female obtained April 14 at Naha.

Ishigaki : 4 specimens (♂ & ♀) obtained on Omotodake in the end of May and the beginning of June.

Iriomote : A ♂ obtained June 15 at Nakama.

On the numerous specimens from Yakushima I observe that the yellow color of the plumage is brighter than in the specimens from the main island of Japan. Compared with these the yellow of the throat extends farther posteriorly on the underside and the yellow area of the rump is somewhat more extensive.

19. Hemichelidon sibirica (GM.).

(Samebitaki).

Yakushima : 2 females; Sept. 29 and Oct. 25.

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20. Terpsiphone illex Bangs.

(Riukiu-Sankōchō).

Amami-Ōshima: Many specimens (♂, ♀ and juv.) obtained in Aug. and Sept. at Kominatomura and Nishi-Nakamura.

Kikaigashima: 2 females, dated Sept. 9.

Iheya: A male and a female; May 15 and 17.

Izena: A single male; May 20.

Yagachi: A single female; April 26.

Jamami: 2 females; July 28.

Okinawashima: 3 males and 1 female, end of May and beginning of April.

Ishigaki: Several specimens obtained in the end of May and in the beginning of June, mostly on Omotodake.

Iriomote: 3 specimens obtained in the middle and end of June on Urauchiyama.

Of this species I have taken the following measurements.

O. C. Sp. No.	Locality.	Date.	Sex.	L. of culman.	L. of wing.	L. of tail.
494	Onnadake, Okinawa ...	May 13...	Ad. ♂	20 mm.	84 mm.	ca. 285 mm.
495	,, ,, ...	April 24...	,, ,,	21 ,,	91 ,,	,, 260 ,,
493	Gushichan, ,, ...	May 3 ...	,, ,,	21 ,,	87 ,,	,, 252 ,,
492	Onnadake, ,, ...	May 13...	,, ♀	20 ,,	84 ,,	97 ,,
223	Omotodake, Ishigaki ...	May 28...	,, ♂	20 ,,	80 ,,	ca. 360 ,,
217	,, ,, ...	,, ,, ...	,, ,,	20 ,,	86 ,,	,, 300 ,,
216	,, ,, ...	June 5 ...	,, ,,	18 ,,	81 ,,	,, 267 ,,
215	,, ,, ...	May 28 ..	,, ,,	20 ,,	85 ,,	,, 243 ,,
221	,, ,, ...	,, ,, ...	,, ,,	19 ,,	85 ,,	,, 265 ,,
220	Tonogusuku, ,, ...	June 7 ...	,, ♀	19 ,,	80 ,,	,, 83 ,,
219	Omotodake, ,, ...	May 31...	,, ,,	19 ,,	81 ,,	,, 81 ,,
218	,, ,, ...	June 5 ...	,, ,,	20 ,,	80 ,,	,, 80 ,,
237	,, ,, ...	July 2 ...	,, ,,	20 ,,	80 ,,	,, 96 ,,
97	Urauchiyama, Iriomote	———	,, ,,	18 ,,	77 ,,	———
98	,, ,,	———	,, ♂	19 ,,	87 ,,	,, 285 ,,
99	,, ,,	———	,, ,,	20 ,,	83 ,,	,, 255 ,,

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21. Hypsipetes amaurotis (T.).
(Hiyodori).

Tanegashima: Numerous specimens obtained in Nov.

Yakushima: Numerous specimens from Miyanototake, about 1833 m. high.

Okinawashima: A ♀ from Naha, April 13.

Ishigaki: A ♂ from Omotodake, May 31.

22. Hypsipetes pryeri Stejn.
(Riukiu-Hiyodori).

Amami-Ōshima: Numerous specimens obtained in Nov. 1904 and Jan. 1905 at several places.

Iheya: 3 males, May 15 and 16.

Jamami: A male specimen, July 22.

Okinawashima: Several specimens obtained in May on Nagogatake.

Ishigaki: 1 ♂ and 2 ♀ specimens obtained May 26 on Kamarayama.

Iriomote: Many specimens obtained in the middle and end of June at different spots.

23. Zosterops japonica insularis, subsp nov.
(Shima-mejiro).

In Tanegashima and Yakushima a large number of this form was obtained in the months of October and November. They seem to be very common on the islands. In Yakushima some of the specimens were obtained at an altitude of 1666—2000 m. above sea-level. For the list of specimens, see below.

The form most nearly resembles *Z. japonica* of Hondō but may be subspecifically separated from it on the ground that the bill, as measured along the culmen, is constantly decidedly longer (longer by 1—3 mm.). Moreover, the wing also is slightly longer on the average, the yellow of the throat is of a brighter or a more intensive tone though in varying degrees

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and the olive-green of the upper parts, especially on the head, is very frequently (not always) suffused with a distinct rusty brown to a greater or less extent.

The subspecies is a smaller bird than *Z. stejnegeri* SEEB. of Hachijō, but is considerably larger than *Z. loochooensis* with which it can not be confounded and which is found in the more southern islands. It seems that the present form is the only *Zosterops* occurring in Tanegashima and Yakushima. I regard it as an insular form of *Z. japonica* which has started on the way of specific differentiation in the two islands mentioned.

Out of the fifty five specimens, which I call *Z. japonica insularis* and all which were collected in Tanegashima and Yakushima, twenty-seven may be said to agree perfectly well, so far as concerns the color of plumage, with typical *Z. japonica* of the main Japanese island, except in the slight fact that the throat is as a general matter of a perceptibly clearer yellow color, which can be detected only by a close comparison of specimens. The remaining twenty-eight specimens, i.e., about half the entire number of the specimens before me, show, as already mentioned, some rusty brown coloration in certain parts of the plumage, and at the same time the yellow of the throat is increased in deepness of tone, approaching the cadmium yellow. The rusty brown may be confined to the forehead; in other cases it extends farther backwards to the top of head and to the cheek; and in still others it is seen even on the back and rump, where it appears here and there in a few isolated patches amidst the usual olive-green. The rule seems to be that greater the extent of the rusty brown coloration, the brighter and deeper is the yellow of the throat. The extreme cases in which the color variation in the direction indicated is most advanced, can not fail to at once attract the notice of observers, but they merge by a series of transitional grades insensibly into the other extreme in which the color of plumage is scarcely distinguishable from that of typical *Z. japonica*.

The measurements are as follows:

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Z. japonica insularis.

O. C. Sp. No.	Locality.	Date.	Sex.	L. of culmen.	L. of wing.	L. of meta tarsus.
717	Masuda in Tanegashima	Nov. 12	Ad. ♂	11 mm.	60 mm.	16 mm.
718	Furuta „ „	„ 9	„ „	11 „	59 „	16 „
724	Noma „ „	„ 13	„ „	11 „	58 „	16 „
722	Shiboyama in „	„ 8	„ „	11 „	60 „	17 „
716	Masuda in „	„ 12	„ „	12 „	60 „	17 „
728	Noma „ „	„ 13	Ad. ♀	11 „	58 „	16 „
276	Furuta „ „	„ 9	„ „	11 „	60 „	16 „
723	Masuda „ „	„ 12	„ „	11 „	59 „	16 „
720	Shiboyama in „	„ 8	„ „	11 „	60 „	17 „
727	Masuda in „	„ 11	„ „	11 „	59 „	16 „
719	Kumano „ „	„ 14	„ „	11 „	60 „	16 „
721	Masuda „ „	„ 12	„ „	11 „	60 „	17 „
725	„ „ „	„ 11	„ „	11 „	59 „	16 „
615	Miyanouradake (1667 m.) in Yakushima	Oct. 14	„ „	12 „	62 „	17 „
625	Miyanoura „ „	„ 23	„ „	12 „	59 „	17 „
624	„ „ „	„ 22	„ „	13 „	59 „	17 „
617	Miyanouradake (1667 m.) „ „	„ —	„ „	12 „	58 „	17 „
619	Kosugiya „ „	„ 20	Ad. ♂	12 „	57 „	17 „
616	Miyanouradake (1667 m.) „ „	„ 19	„ „	12 „	57 „	17 „
626	Tomaidake „ „	„ 15	„ „	12 „	60 „	16 „
615	———	„ 20	„ „	12 „	60 „	17 „
620	Kosugigaya „ „	„ 27	„ „	11 „	58 „	16 „
630	Miyanoura „ „	„ 23	„ „	13 „	57 „	16 „
636	Miyanouradake (1833 m.) „ „	„ 19	„ „	12 „	58 „	16 „
628	Mitake (2000) in „ „	„ 16	„ „	11 „	56 „	16 „
632	Miyanoura „ „	„ 21	„ „	12 „	58 „	17 „
623	„ „ „	„ 22	„ „	12 „	60 „	17 „
*709	Shiboyama in Tanegashima	Nov. 8	Ad. ♂	12 „	60 „	16 „

* All the specimens following this mark in the above table are those which show more or less rusty brown in the upper parts and in which the throat is of a deep yellow color.

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O. C. Sp. No.	Locality.	Date.	Sex.	L. of culmen.	L. of wing.	L. of metatarsus.
715	Shibayama in Tanegashima	Nov. 7	Ad. ♂	12 mm.	60 mm.	16 mm.
710	,, ,, ,, ...	,, 8	,, ,,	12 ,,	58 ,,	17 ,,
708	,, ,, ,, ...	,, 7	,, ,,	12 ,,	59 ,,	17 ,,
712	,, ,, ,, ...	,, 13	,, ,,	11 ,,	59 ,,	17 ,,
713	Noma ,, ,, ...	,, 7	Ad. ♀	12 ,,	58 ,,	17 ,,
114	Shiboyama ,, ,, ...	,, 8	,, ,,	12 ,,	60 ,,	16 ,,
711	,, ,, ,, ...	,, 9	,, ,,	12 ,,	59 ,,	16 ,,
707	Furuta ,, ,, ...	,, 7	,, ,,	11 ,,	59 ,,	15 ,,
661	Shiboyama ,, ,, ...	Oct. 21	Ad. ♂	11 ,,	60 ,,	18 ,,
669	Miyanoura in Yakushima	,, ,,	,, ,,	12 ,,	60 ,,	17 ,,
662	,, ,, ,, ...	,, ,,	,, ,,	11 ,,	62 ,,	18 ,,
650	,, ,, ,, ...	,, 16	,, ,,	11 ,,	59 ,,	16 ,,
666	Miyanouradake (2000 m.) in Yakushima	,, 14	,, ,,	11 ,,	60 ,,	16 ,,
652	,, (1667 m.) ,, ,,	,, 21	,, ,,	12 ,,	60 ,,	18 ,,
639	Miyanoura ,, ,,	,, 23	,, ,,	12 ,,	62 ,,	17 ,,
628	,, ,, ,,	,, 21	,, ,,	12 ,,	61 ,,	17 ,,
659	,, ,, ,,	,, 18	,, ,,	12 ,,	61 ,,	16 ,,
670	Miyanouradake (1667 m.) ,, ,,	,, 12	,, ,,	13 ,,	60 ,,	17 ,,
633	Miyanoura ,, ,,	,, 22	Ad. ♀	11 ,,	58 ,,	16 ,,
647	,, ,, ,,	,, —	,, ,,	12 ,,	58 ,,	17 ,,
663	,, ,, ,,	,, 21	,, ,,	11 ,,	60 ,,	16 ,,
656	Kosugidani ,, ,,	,, 29	,, ,,	— ,,	58 ,,	17 ,,
649	Miyanoura ,, ,,	,, 23	,, ,,	12 ,,	59 ,,	16 ,,
646	,, ,, ,,	,, 22	,, ,,	12 ,,	60 ,,	17 ,,
653	,, ,, ,,	,, 21	,, ,,	12 ,,	60 ,,	16 ,,
668	Misegaya ,, ,,	,, 7	,, ,,	12 ,,	57 ,,	16 ,,
635	——— ,, ,,	Dec. 1	,, ,,	12 ,,	60 ,,	16 ,,

For the purpose of comparison with typical *Z. japonica* with respect to measurements I have prepared the following table :

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Z. japonica from Hondō.

Sp. No.	Locality.	Date.	Sex.	L. of culmen.	L. of wing.	L. of metatarsus.
O. C. 1	Subashiri n. Fuji... ...	June ...	♂	10 mm.	57 mm.	16 mm.
„ „ 2	„	Oct. ...	„	10 „	57 „	16 „
„ „ 3	„	June ...	„	10 „	56 „	16 „
„ „ 4	„	„ ...	„	10 „	58 „	16 „
„ „ 5	„	„ ...	„	10 „	60 „	16 „
„ „ 6	„	April...	„	10 „	60 „	16 „
Sci. Coll. 2517	Tokyō	Nov....	♀	10 „	56 „	16 „
„ „ 2518	„	„ ...	„	10 „	57 „	16 „
„ „ 1418	„	„ ...	„	10 „	60 „	16 „
„ „ 1512	„	„ ...	„	10 „	60 „	16 „
„ „ 1067	„	„ ...	„	10 „	60 „	16 „
„ „ 1424	„	„ ...	„	10 „	58 „	16 „
„ „ 7	Subashiri	Jan. ...	„	10 „	60 „	16 „
„ „ 8	„	Oct. ...	„	10 „	58 „	16 „
„ „ 9	„	April...	„	10 „	57 „	16 „
„ „ 10	„	Feb. ...	„	10 „	59 „	16 „

24. Zosterops loochooensis Tristram.

(Riukiu-Mejiro).

Amami-Ōshima: Several specimens, Sept. to Jan. (see the list given below.)

Kikaigashima: 2 specimens in Aug. and Sept.

Tokunoshima: 2 ♀s, Aug. 13 on Mount Kidoku.

Okino-Erabushima: No specimen obtained, but the species was observed to be not rare on the island.

Iheya: A ♂, May 17.

Yagachi: 2 ♂s, April 28.

Jamami: 2 ♂s, July 23.

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Okinawashima : 3 specimens, middle of April, in Naha.
Ishigaki : 2 ♂s, May 20 and June 4.
Iriomote : A ♂, June 21, at Urauchi.

The species seems not to occur in more northern islands than Amami-Ōshima. In Yakushima and Tanegashima it is replaced by *Z. japonica insularis*.

List and measurements of the specimens from Amami-Ōshima.

O. C. No.	Exact locality.	Date.	Sex.	L. of culmen.	L. of wing.	L. of metatarsus.
1559	Nishinakakatsu... ...	Jan. 10...	Ad. ♂	10 mm.	56 mm.	17 mm.
1566	,, ...	,, 7...	,, ,,	,, ,,	55 ,,	16 ,,
1563	,, ...	,, 12...	,, ,,	,, ,,	57 ,,	15 ,,
1552	Ikebata	Sept.12...	,, ,,	,, ,,	54 ,,	14 ,,
1549	Kominato	,, 8...	,, ,,	,, ,,	56 ,,	15 ,,
1574	Nishinakakatsu	Jan. 12...	,, ,,	,, ,,	54 ,,	14 ,,
1576	,, ...	,, 10...	,, ,,	,, ,,	55 ,,	14 ,,
1568	,, ...	,, ,,...	,, ,,	,, ,,	56 ,,	16 ,,
1551	Kominato	Sept. 8...	,, ,,	,, ,,	52 ,,	15 ,,
1570	Nishinakakatsu... ...	Jan. 10...	,, ,,	,, ,,	56 ,,	14 ,,
1553	Nase	Sept. 2...	Ad. ♀	,, ,,	55 ,,	16 ,,
1564	Nishinakakatsu... ...	Jan. 12...	,, ,,	,, ,,	56 ,,	16 ,,
1561	,, ...	,, 9...	,, ,,	,, ,,	55 ,,	16 ,,
1573	,, ...	,, 10...	,, ,,	,, ,,	58 ,,	16 ,,
1555	Toguchiyama	Dec. 11...	,, ,,	,, ,,	56 ,,	17 ,,
1567	Nishinakakatsu... ...	Jan. 12...	,, ,,	,, ,,	52 ,,	15 ,,
1557	,, ...	,, 10...	,, ,,	,, ,,	55 ,,	17 ,,

25. Locustella fasciolata (Gray).

(Ezo-Sennyū).

A single female of this species, which is exceedingly rare in Japan, was obtained May 28, 1904, on Omotodake in Ishigakishima.

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This is the first specimen of the species recorded from the Loochoo Islands.

26. Urophlexis ussuriana (Seeb.).

(Shiwosazai).

Yakushima: A single male obtained Oct. 23, at Miyanoura in the island.

This species is rather rare in Japan.

27. Cettia cantans (T. & S.).

(Uguisu).

Tanegashima: 22 ♂ and 12 ♀ specimens collected in Nov.
Yakushima: 31 ♂ and 15 ♀ specimens, during Nov. and Dec.
Amami-Ōshima: 1 ♀, Dec. 11.
Okinawashima: 1 ♀, April 14, at Naha.

In view of the question if *C. cantans* and *C. cantillans* are really distinct species,—a question which many observers in Japan, Mr. Owston and myself included, are strongly inclined to answer in the negative not only on account of the meager evidence on which the distinction rests but also on the strength of observations in field and on a large material of specimens, —special care was taken by the collector in sexing the examples of *Cettia*. Now, the specimens from Tanegashima and Yakushima, eighty in all, can easily be separated into two distinct groups according to the size of individuals. All the larger individuals, fifty-three in number, are found to be males, while every one of the smaller individuals, numbering twenty-seven in all, is of the female sex. The measurements in averages taken from the two groups are as follows:

	Culmen.	Wing.	Tarso-metatarsus.
I. Average lengths taken from 53 specimens, all ♂s	11 mm.	64.5 mm.	23 mm.

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II. Average lengths taken from

27 specimens, all ♀s ..... 10 mm. ... 55.0 mm. ... 20 mm.

Of the latter group, none shows any indication of being specifically distinct from the rest. I conclude that the present collection at any rate contains but one *Cettia* species, viz, *C. cantans*, in which the males are persistently larger-bodied than the females.

28. Cisticola brunniceps (T. & S.)

(Shibamuguri).

Iheya: 1 ♀, May 17.

Izena: 1 ♂, May 20,

Yagachi: 1 ♀, April 27.

Okinawashima: 2 ♂s, captured April and May at Naha.

Kudaka: 1 ♂, April 22.

Miyako: 1 ♂, July 11.

Ishigaki: 1 ♂, June 4, on Omotoyama.

Iriomote: 1 ♂, June 29, on the island Sotobanarejima.

29. Regulus cristatus orientalis Seeb.

(Kiku-itadaki).

Tanegashima: A ♂ obtained in Nov.

30. Parus ater pekinensis Seeb.

Yakushima: 25 examples (♂ & ♀) collected during Sept., Oct. and Dec.

Parus minor (T. & S.)

(Shijūkara).

Amami-Ōshima: 2 ♂s obtained Sept. 15 and Jan. 2.

Tokunoshima: 1 ♂, Aug. 17.

All the specimens tally well with those from Japan proper.

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32. Parus commixtus Sw.
(Riukiu-Shijūkara).

Amami-Ōshima: 3 ♂s and 1 ♀ obtained in Aug. and Sept.
Tokunoshima: 1 ♂ and 1 ♀, Aug. 13, on the hill called Kidoku.
Yagachi: 1 ♂, April 26.
Okinawashima: Numerous specimens (♂, ♀ and juv.) collected during April, May and July in Naha.
Ishigaki: 3 ♂s, end of May and June 3, on Omotodake.
Iriomote: 1 specimen, unsexed.

The species closely resembles *P. minor* but may be readily distinguished from it by the absence of the yellow shown by the latter on back. The three specimens from Ishigaki are somewhat darker in general coloration than those from the more northern islands.

33. Parus varius T. & S.
(Yamagara).

Tanegashima: 18 specimens obtained in Nov.
Yakushima: 37 specimens, during Sept. and Oct.
Amami-Ōshima: 1 ♂, Sept. 7.
Okinawashima: 1 ♂ and 1 ♀, Kunchan May 8.

34. Troglodytes fumigatus T.
(Misosazai).

Tanegashima: 1 specimen obtained.
Yakushima: 6 ♂s and 1 ♀ secured at several localities during Sept., Oct. and Nov.

All the Yakushima specimens appear somewhat darker than those from Japan proper. Two of the specimens were obtained on Miyanotake at an altitude of 1666 m.

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35. Corvus macrorhynchus japonensis (Bp.).

(Hashibuto-garasu).

Tanegashima : 2 ♂s, middle of Nov.

Yakushima : 3 specimens (♂ & ♀), latter part of Oct.

36. Corvus macrorhynchus levaillanti Less.

(Riukiu-Hashibuto-garasu).

Tanegashima : 1 ♀ ; Nov. 6.

Yakushima : 1 ♀ ; Oct. 30.

Jamami : 2 juv. (♂ and ♀) ; July 22.

Okinawashima : 6 ♂s, during May.

Miyako : 1 ♂, 1 ♀ and 2 juv.; July 5 and 7.

The following measurements were taken :

Adult specimens.

No.	Locality.	Date.	Sex.	Culmen.	Height* of bill at nostrils.	Wing.	Tail.	Tarsus.
O. C. 452	Okinawashima...	May 1.	♂	66 mm.	16 mm.	325 mm.	207 mm.	58 mm.
,, ,, 509	,, ...	,, 5.	,,	68 ,,	16 ,,	325 ,,	216 ,,	57 ,,
,, ,, 715	,, ...	,, 8.	,,	68 ,,	16 ,,	322 ,,	219 ,,	57 ,,
,, ,, 510	,, ...	,, ,,	,,	68 ,,	16 ,,	310 ,,	199 ,,	60 ,,
So.Coll. 2484	,, ...	——	,,	66 ,,	16 ,,	320 ,,	216 ,,	58 ,,
O. C. 76	Miyakoshima ...	July 5.	,,	72 ,,	16 ,,	320 ,,	218 ,,	56 ,,
,, ,, 75	,, ...	,, 7.	♀	66 ,,	16 ,,	320 ,,	216 ,,	58 ,,
		In average :		68 mm.	16 mm.	320.3 mm.	211.8 mm.	57.4 mm.

* Measured by placing one point of a divider on the cutting edge and the other on the culmen.

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Young specimens

No.	Locality.	Date.	Sex.	Culmen.	Height of bill at nostrils.	Wing.	Tail.	Tarsus.
O. C. 952	Jamami	July 22.	♂	67 mm.	16 mm.	313 mm.	196 mm.	59 mm.
„ „ 953	... ...	„ „	♀	70 „	16 „	315 „	190 „	60 „
„ „ 78	Miyakoshima ...	July 7.	♀	64 „	15 „	308 „	195 „	56 „
			In average :	67 mm.	15.6 mm.	312 mm.	193.6 mm.	58.3 mm.

37. Corvus macrorhynchus osai SUBSP. NOV.

(Osagarasu).

The present collection has revealed the presence in the Loochoo Islands of a small race of *C. macrorhynchus*, smaller in a considerable degree than the size usually ascribed to *C. m. levaillanti* and which I have called by the above name. Of this new race or subspecies fifteen specimens in all have been collected in Okinawashima, Ishigaki and Iriomote. Two of them are young-of-the year; the rest are adults with well developed plumage.

In the general color and gloss of plumage, in the general shape of bill and in the feathers having dark-gray base, the subspecies closely agrees with *C. m. levaillanti*. It may well be considered as a diminutive form of the latter, with which it seems however to be connected by birds of intermediate dimensions. The size may be said to be about equal to that of *C. pastinator* and, to judge from the length of wing, to be only about $\frac{2}{3}$ the size of the typical Malayan *C. macrorhynchus* or of *C. m. japonensis*. An idea of the size in relation to that of *C. m. levaillanti* may be obtained by comparing the measurements given under No 36 with those embodied in the following list of the specimens, all which I include under *C. m. osai*.

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Adult specimens.

O. C. No.	Locality.	Date.	Sex.	Culmen.	H. of bill at nostrils.	Wing.	Tail.	Tarsus.
1586	Gushichan ... (Okinawashima)	May 8.	Ad.♂	59 mm.	15 mm.	290 mm.	183 mm.	51 mm.
1261	Ishigaki	„ 29.	„ „	59 „	14 „	294 „	199 „	51 „
1580	„	June 5.	„ „	58 „	14 „	294 „	186 „	47 „
1587	„	May 26.	„ „	55 „	14 „	276 „	184 „	46 „
1647	Kohama	July 26.	„ „	58 „	15 „	282 „	183 „	54 „
1585	Iriomote	June 25.	„ „	61 „	14 „	284 „	186 „	54 „
1646	Shinjōshima ... (Miyako ?)	July 15.	„ „	58 „	15 „	285 „	189 „	51 „
1262	Okinawa	May 14.	Ad.♀	58 „	15 „	285 „	186 „	55 „
1583	Nago ... ... (Okinawashima)	„ 14.	„ „	57 „	14 „	285 „	184 „	51 „
1584	Ishigaki	„ 26.	„ „	55 „	13 „	280 „	185 „	51 „
1581	„	„ „	„ „	56 „	13 „	276 „	180 „	47 „
1582	„	„ „	„ „	55 „	13 „	270 „	176 „	51 „
1648	Kuroshima ...	July 12.	„ „	59 „	15 „	285 „	183 „	51 „
			In average :	57.1 mm.	14.1 mm.	283.6 mm.	184.9 mm.	50.7 mm.

Young specimens.

1578	Iriomote	June 26.	Juv. ♀	50 mm.	13 mm.	242 mm.	174 mm.	44 mm.
1579	„	„	♂	52 „	13 „	252 „	167 „	47 mm.

38. Garrulus japonicus (T. & S.).

(Kashidori).

A female obtained in Yakushima, Oct. 27. The color of the back and breast in the single specimen is much darker than that in specimens from Hondō.

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39. Garrulus lidthi Bp.

(Ruri-Kashidori).

Pl. IX.

One of the greatest services done by Mr Owston's collector is the re-discovery of this beautiful species, which has long been known to exist somewhere in Japan but has stood out of the reach of recent collectors. A short description of it stands in the British Museum Catalogue, vol. III, p. 102 ; earlier relevant literature is not accessible to me. Some comments on the species were given by Blakiston and Pryer in their "Birds of Japan," p. 145.

The specimens before me, 12 in number and all obtained during Aug. and Sept. on the island of Amami-Ōshima, tally essentially with Bonaparte's description of *G. lidthi* as given in the Brit. Mus Catalogue (*l. c*), so that I do not hesitate to pronounce them all to be of that species. In no other island than the one mentioned the species was met with The list and measurements are as follows :

	Localities in Amami-Ōshima.	Date.	Sex.	Culmen.	Wing.	Tail.	Tarsus.
O. C. 1328	Kominato	Sept. 5.	Ad. ♂	40 mm.	174 mm.	187 mm.	42 mm.
„ „ 1321	„	„ 8.	„ „	38 „	172 „	178 „	45 „
Sci.Coll.Mus.	„	„ „	„ „	34 „	182 „	188 „	45 „
O. C. 1320	„	„ „	Ad. ♀	38 „	175 „	172 „	42 „
„ „ 1325	„	„ 2.	„ „	38 „	174 „	170 „	45 „
„ „ 1329	„	„ 8.	„ „	38 „	173 „	168 „	43 „
„ „ 1322	„	„ „	„ ..	39 „	174 „	160 „	43 „
Sci.Coll.Mus.	Asadomura	„ 7.	„ „	34 „	174 „	174 „	45 „
O. C. 1323	Nakagawayama ...	„ 6.	Juv. ♂	39 „	162 „	——	41 „
„ „ 1326	Konia	Aug. 27.	„ „	40 „	171 „	173 „	46 „
„ „ 1324	„	„ 28.	„ „	38 „	171 „	160 „	45 „
„ „ 1327	Komimura	Sept. 5.	„ „	36 „	167 „	——	43 „

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The color of adult plumage, which is the same in both sexes, may be summarily described as follows: Forehead, lores, circumorbital and malar regions jet-black. Crown of head, auriculars, hind-neck, sides and front of neck, wings and tail deep Prussian-blue. Feathers of the crown with indistinct vermiculation. Those of the throat lanceolate with lax barbules, black with white shaft-lines. Back and rump as well as breast, belly and under tail-coverts vinous chestnut-red. Greater wing-coverts and most secondaries banded with black and Prussian-blue on the outer webs (no white bars). Remiges and rectrices with white tip, mostly blackish on the inner webs and towards the end. Outermost rectrix shorter than the innermost by about 26mm. According to the collector's notes, the much compressed bill, the feet and claws are all light blue; iris deep blue.

The young specimens differ from the adults chiefly in having the head and neck dull dark-brown intermixed with a greater or less number of blue feathers and in wanting white tip to remiges and rectrices.

BLAKISTON and PRYER (*l. c.*) mention the information given them by SEEBOHM to the effect that the head and ear-coverts in *G. lidthi* is rufous. This is evidently a mistake.

40. Lanius bucephalus T. & S.

(Mozu).

Tanegashima: 22 specimens obtained in Nov. and Dec.
Yakushima: 9 specimens in Sept, Oct. and Nov.
Amami-Ōshima: 1 ♀, Nov. 29.

41. Pericrocotus tegimæ STEJN.

(Riukiu-Shanshokui).

Tanegashima: 2 ♀s and 1 ♂ obtained in Nov.
Yakushima: 1 ♀, Sept. 28, at Kosugidani.
Amami-Ōshima: 1 ♀ and 3 ♂s, Sept. 7—Nov. 18.
Okinawashima: 2 ♂s, May 5 and April 15 at Naha.
Ishigaki: 1 ♂ and 1 ♀, May 28 and June 28, on Kawarayama and Omotodake.

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Iriomote : 4 ♂s, including a young, obtained in June at Sonai and Komimura.

42. Sturnus cineraceus T.
(Mukudori).

Amami-Oshima : a ♀ obtained Nov. 30 in Kominatomura.

43. Sturnia pirrhogenys (T. & S.).
(Komukudori).

Okinawashima : 1 ♀ and 2 ♂s obtained in May in Kunchan.

Ishigaki : 3 specimens, June 2 and 3, on Omotodake and on the coast of Naguramura.

44. Motacilla lugens Kittl.
(Haku-Sekirei).

Tanegashima : 29 specimens (♂, ♀ and juv.) in different phases of plumage color collected during Nov. and Dec.

Yakushima : 7 specimens, in Oct. and Nov.

45. Motacilla boarula melanope (Pall.).
(Kisekirei).

Tanegashima : 11 specimens obtained in Nov.

Yakushima : 3 specimens (all ♀), end of Oct. in Miyanoura.

Amami-Ōshima : 7 specimens, in Sept. at different places.

Kikaigashima : 1 ♀, Sept. 10.

Okinawashima : Several specimens (♂ & ♀), April 13 and 14 at Naha. Males with black on the throat.

46. Anthus japonicus (T. & S.).
(Tahibari).

Tanegashima : A single ♂ obtained.

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47. Alauda japonica (T. & S.).

(Hibari).

Yakushima : 2 ♂s obtained Nov 24 and Dec. 24. No difference from the Hondo specimens.

48. Coccothraustes vulgaris Pall.

(Shime).

Okinawashima : 1 ♀, May 3.

49. Fringilla spinus L.

(Mahiwa).

Okinawashima : 1 ♂, May 8 in Kunchan.

50. Passer montanus (L.).

(Suzume).

Tanegashima : 15 specimens, Nov.
Yakushima : 1 ♀, Nov. 30.

51. Passer montanus saturatus Stejn.

(Riukiu-Suzume).

The tree-sparrow of Amami-Ōshima and of the more southern islands are referable to this subspecies. I have specimens from :
Amami-Ōshima : 1 ♂ and 1 ♀ obtained in Sept.
Kikaigashima : 3 (♂ & ♀) examples, Sept.
Okino-Erabushima : 1 ♂, Aug. 7.
Izena : Several obtained in April and May.
Okinawashima : Numerous specimens obtained in April and May at Naha.
Miyakoshima : 2 ♂s and 2 ♀s, in July at different places.
Ishigaki : Many specimens, in May and June at different places.

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52. Emberiza ciopsis Bp.

(Hōjiro).

Tanegashima : 19 specimens obtained in Nov.

Yakushima : 13 specimens obtained in Oct.

53. Emberiza fuscata Pall.

(Hō-aka).

Tanegashima ; 1 ♀, Nov. 21.

54. Emberiza personata T.

(Awoji).

Tanegashima : 3 ♂s, Nov. 25.

Yakushima : 4 specimens (♂ & ♀), Nov. 25 and Dec. 19.

55. Emberiza variabilis T.

(Kuroji).

Tanegashima : 3 specimens (♂ & ♀), end of Nov. and early in Dec.

Yakushima : 1 ♀, Nov. 30.

56. Chelidon namiyei Stejn.

(Riukiu-Tsubame).

Amami-Ōshima : Several specimens of both sexes collected in Aug. and Sept. at various localities.

Tokunoshima : 2 ♂s and 2 ♀s, in Aug , on the coast.

Jamami : 1 ♂ and 1 ♀, July 22 and 24.

Okinawashima : 1 ♂, April 16 in Naha.

57. Gecinus awokera (T.).

(Awokera).

Tanegashima : 1 ♀ obtained in the middle of Nov. and another in the beginning of Dec. Both quite identical with Hondō specimens.

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58. Picus noguchii Seeb.

(Noguchigera).

Okinawashima: Several specimens obtained in April and May on the mountain Nagogatake. The list and measurements are as follows:

O.C. No.	Locality.	Date.	Sex.	Culmen.	Wing.	Tail.	Tarsus.
778	Nagogatake	April 18	Ad. ♂	40 mm.	153 mm.	103 mm.	27 mm.
779	„	May 5	„ „	43 „	156 „	111 „	25 „
781	„	„ 10	„ „	43 „	152 „	117 „	24 „
782	„	„ 5	„ „	40 „	152 „	107 „	26 „
1099	„	„ 21	„ „	42 „	—	107 „	26 „
780	„	„ 2	Ad. ♀	41 „	—	112 „	27 „
1098	„	„ 10	„ „	39 „	154 „	111 „	28 „

59. Picus owstoni sp. nov.

(Owstongera).

Pl. X.

A fine series of this new species was collected in the period of Aug.—Jan. at several places in the island of Amami-Ōshima. The collection contains five young-of-the year.

Characters. Of about the same size as *P. leuconotus subcirris* of Japan proper or slightly larger. It also resembles that species in color but the white is everywhere very much reduced in extent and the underparts much darker, apparently coming in these respects nearer to the little known *P. namiyei* of Hondō and to *P. insularis* of Formosa, both which are however much smaller birds.

Adult ♂.—Frontal band ill-defined, drabby brown with more or less black hairs; top of head crimson as usual; rest of the upper parts black, excepting a limited number of irregularly disposed, white spots on the lower back. Lores, auriculars and sides of neck drabby brown; dusky on

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the auriculars. Black malar stripe extending behind to the shoulder. Throat drabby or buffy brown; lighter anteriorly. Feathers of the breast, including those in the median part, with a broad middle stripe of black, both sides of which are brownish buff more or less tinged with dark red. Entire flanks dark red and broadly striped with blackish Belly and under tailcoverts dark red Wings black, with comparatively small white spots, of which only a few are found on the greater coverts. Black bands on the two outermost tail-feathers broad.

The ♀ differs from the ♂ in having the top of head black and in having somewhat more white on the lower back.

Young ♂s show only dull red spots on the top of head; the black parts and the red of the under parts duller than in adults.

List and Measurements of Picus owstoni obtained in Amami-Ōshima.

O.C. No.	Exact locality.	Date.	Sex.	Culmen.	Wing.	Tail.	Tarsus.
1234	Akatsuchiyama... ...	June 2.	Ad ♀	39 mm.	151 mm.	98 mm.	25 mm.
1237	Ōkumanuma	,, 8.	,, ,,	38 ,,	153 ,,	102 ,,	25 ,,
1225	Asatomura	Dec. 2.	,, ,,	41 ,,	155 ,,	98 ,,	23 ,,
1229	Narikawayama... ...	Nov. 29.	,, ,,	40 ,,	150 ,,	95 ,,	24 ,,
1230	,,	,, ,,	,, ,,	41 ,,	151 ,,	99 ,,	25 ,,
1233	,,	Dec. 16.	,, ,,	40 ,,	151 ,,	98 ,,	25 ,,
1231	Asatomura	Nov. 20.	,, ,,	43 ,,	151 ,,	96 ,,	25 ,,
1232	Narikawamura	,, ,,	,, ,,	36 ,,	148 ,,	93 ,,	24 ,,
1222	Tokuchiyama	Dec. 14.	,, ,,	37 ,,	154 ,,	99 ,,	25 ,,
1219	Ōkumamura	Jan. 8.	Ad. ♂	42 ,,	151 ,,	99 ,,	24 ,,
1214	Kanamatsuyama ...	Nov. 10.	,, ,,	41 ,,	153 ,,	94 ,,	25 ,,
1215	Ōkumamura	Jan. 12.	,, ,,	42 ,,	152 ,,	96 ,,	24 ,,
1235	Narikawayama... ...	Nov. 10.	,, ,,	42 ,,	157 ,,	101 ,,	26 ,,
1223	Asatomura	Dec. 17.	,, ,,	41 ,,	155 ,,	102 ,,	26 ,,

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O.C. No.	Exact locality.	Date.	Sex.	Culmen.	Wing.	Tail.	Tarsus.
1236	Nishi-Nakamamura.	Jan. 7.	Ad. ♂	42 mm.	154 mm.	98 mm.	26 mm.
1221	Urakamimura	Dec. 28.	,, ,,	42 ,,	152 ,,	98 ,,	25 ,,
1210	Ōkumamura	Jan. 8.	,, ,,	42 ,,	151 ,,	95 ,,	24 ,,
1211	Asatomura	Nov. 20.	,, ,,	43 ,,	153 ,,	99 ,,	26 ,,
1220	,,	,, 27.	,, ,,	43 ,,	151 ,,	96 ,,	26 ,,
1213	Narikawayama... ...	,, 20.	,, ,,	43 ,,	156 ,,	100 ,,	26 ,,
1218	Urakamimura	Dec. 28.	,, ,,	43 ,,	149 ,,	92 ,,	25 ,,
1227	Koniya	Aug. 27.	,, ,,	42 ,,	144 ,,	94 ,,	26 ,,
1212	Nakanoyama	Sept. 11.	,, ,,	44 ,,	153 ,,	95 ,,	26 ,,
1209	Nase...	,, 4.	,, ,,	41 ,,	149 ,,	94 ,,	—
1217	Nakagawayama ...	,, 6.	,, ,,	42 ,,	150 ,,	92 ,,	24 ,,
1226	Asatomura	Dec. 8.	,, ,,	44 ,,	152 ,,	98 ,,	26 ,,
1238	Kominato	Sept. 5.	Juv. ♂	38 ,,	141 ,,	90 ,,	26 ,,
1224	Ishimineyama	,, ,,	,, ,,	—	156 ,,	98 ,,	26 ,,
1216	Naganeyama	,, 8.	,, ,,	37 ,,	150 ,,	89 ,,	24 ,,
1228	Koniya	Aug. 27.	,, ,,	41 ,,	143 ,,	92 ,,	24 ,,
1239	———	Sept. 7.	,, ,,	40 ,,	151 ,,	95 ,,	26 ,,

60. Iyngipicus kizuki nigrescens Seeb.

(Riukiu-Kogera).

Yakushima: 3 ♂s and 1 ♀ obtained in Oct.

Amami-Ōshima: 7 specimens, all ♂s, obtained in Aug and Sept.

Yagachi: 1 specimen, April 26.

Okinawashima: 3 ♂s and 1 ♀, during May, in Kunchan.

61. Turtur orientalis (Lath.).

(Kijibato).

Tanegashima: 6 specimens; Nov. and Dec.

Yakushima: 1 ♂ specimen; Oct 4.

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Amami-Ōshima : 5 specimens ; Nov. and Dec.
Izena : Several specimens ; April, May and June.
Yagachi : 4 ♂s and 1 ♀ ; April 27 and 29.
Jamami : 1 ♀ ; July 28.
Okinawashima : Several specimens ; May, in Kunchan and on Onna-dake.
Kudaka : 1 ♀ ; April 22.
Miyako : Several specimens ; July.
Ishigaki : ,, ,, ; May, June and July.
Iriomote : 1 ♂ ; June 21.

The single specimen from Yakushima is much darker in general coloration than specimens from Hondō. The same is to be said of one ♂ specimen from Yagachi, though the rest of specimens from the same island compare well with average Hondō examples.

62. Chalcohaps indica (L.).

(Kinbato)

A beautiful ♂ obtained July 2 on Humayama in Ishigaki.

A ♂ and a ♀ captured June 20 at Hunauki in Iriomote.

The Science College Museum contains a specimen obtained by Mr. MIKIHARA on Hatomashima, one of the Yayeyama group, in July 1893.

63. Sphenocercus permagnus (STEJN.).

(Riukiu-Awobato).

Numerous specimens from Yakushima, Amami-Ōshima and Okinawashima. List and measurements as follows :

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O.C. No.	Locality.	Date.	Sex.	Culmen.	Wing.	Tail.
270	Miyanouradake (1666 m.), Yakushima.	Oct. 16.	Ad. ♂	28 mm.	203 mm.	134 mm.
271	,, ,, ,,	,, ,,	,, ,,	27 ,,	201 ,,	138 ,,
269	,, ,, ,,	,, 13.	Ad. ♀	25 ,,	—	—
1436	Nishi-Nakakatsumura, Amami-Ōshima.	Dec. 27.	Ad. ♂	26 ,,	205 ,,	147 ,,
1435	——— ,,	———	,, ,,	25 ,,	205 ,,	142 ,,
1443	Toguchiyama, ,,	Nov. 29.	,, ,,	25 ,,	196 ,,	139 ,,
1441	Nakaneyama, ,,	Dec. 28.	,, ,,	26 ,,	193 ,,	121 ,,
1442	Kominato, ,,	,, 4.	,, ,,	26 ,,	211 ,,	148 ,,
1438	Asatomura, ,,	,, 16.	—	—	—	—
1439	Kanamatsumura, ,,	Sept. 10.	Ad. ♀	26 ,,	195 ,,	137 ,,
1437	Ishimineyama, ,,	,, 5.	,, ,,	26 ,,	205 ,,	134 ,,
1440	Nakaneyama, ,,	,, 11.	,, ,,	25 ,,	197 ,,	128 ,,
497	Kunchan, Okinawashima	May 5.	Ad. ♂	24 ,,	200 ,,	140 ,,

64. Sphenocercus medioximus Bangs.

(Chūdai-Awobato).

Numerous specimens from Ishigaki and Iriomote as contained in the following table :

O.C. No.	Locality.	Date.	Sex.	Culmen.	Wing.	Tail.
226	——— Ishigaki ...	May 31 ...	Ad. ♂	25 mm.	197 mm.	142 mm.
233	Kawarayama, ,, ...	,, 25 ...	,, ,,	23 ,,	184 ,,	133 ,,
232	Omotedake, ,, ...	,, 27 ...	,, ,,	25 ,,	185 ,,	133 ,,
229	Kawarayama, ,, ...	,, 25 ...	,, ,,	25 ,,	198 ,,	148 ,,
234	,, ,, ...	June 5 ...	,, ,,	25 ,,	181 ,,	124 ,,
231	,, ,, ...	May 31 ...	,, ,,	24 ,,	187 ,,	130 ,,
220	——— ,, ...	———	Ad. ♀	24 ,,	178 ,,	123 ,,
227	Nagura, ,, ...	May 31 ...	,, ,,	25 ,,	188 ,,	131 ,,
824	——— ,, ...	———	,, ,,	22 ,,	180 ,,	120 ,,

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O.C. No.	Locality.	Date.	Sex.	Culmen.	Wing.	Tail.
225	Omotodake, Ishigaki	May 31 ...	Ad. ♀	24 mm.	183 mm.	129 mm.
830	——— „	———	„ „	22 „	191 „	126 „
118	Mauchi, Iriomote	June 19 ...	„ „	24 „	193 „	122 „
120	Sonai, „	„ 24 ...	Ad. ♂	24 „	189 „	136 „
122	„ „	„ 23 ...	„ „	23 „	190 „	130 „
119	Mauchi „	„ 21 ...	„ „	25 „	190 „	127 „
117	„ „	„ 21 ...	„ „	24 „	191 „	121 „
121	Kazami, „	„ 16 ...	Ad. ♀	23 „	195 „	134 „

65. Carpophaga ianthina (T.).

(Karasubato).

Tanegashima: 2 ♂s; Decem.

Yakushima: 1 ♂ and 1 ♀; Oct 16 and Sept 24, on Miyanouradake at an altitude of 2000 m.

Amami-Ōshima: 1 ♂ and 1 ♀, Jan 7 in Nishi-Nakamamura and Dec. 8 on the mountain Sumiyo.

66. Carpophaga jouyi (Stejn.).

(Riukiu-Karasubato).

Iheya: 1 ♂; May 16.

Izena: Several specimens; May, April and July.

Yagachi: 1 ♂; April 28.

Jamami: 1 ♂; July 28.

67. Cuculus kelungensis Sw.

(Tsutsudori).

Ishigaki: 1 ♂ and 1 ♀; June 8 and 9, on Kawarayama.

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68. Halcyon coromanda rufa (Wallace).

(Riukiu-Akashōbin).

Amami-Ōshima: 4 specimens, Kominato Aug. and Sept.
Okino-Erabujima: 1 ♀; Aug. 7.
Iheya: 1 ♀; May 17.
Izena: 1 ♂; April 23.
Jamami: 1 ♂; July 23.
Okinawashima: 5 specimens (♂ & ♀); Naha April and May.
Ishigaki: Several beautiful specimens (♂ & ♀); May, June and July. Some with considerably shorter bill than others.
Iriomote: Several specimens (♂ & ♀); June.

69. Alcedo ispida bengalensis (Gm.).

(Kawasemi).

Tanegashima: Numerous beautiful specimens obtained in Nov. and Dec.
Amami-Ōshima: Numerous specimens obtained in Aug. and Sept.
Kikaigashima: 1 ♂; Sept 10.
Tokunoshima: 1 ♂ and 1 ♀; Aug. 13.
Okino-Erabushima: 1 ♂ and 1 ♀; Aug. 7.
Izena: 3 ♂s; April 23 and May 9.
Yagachi: 2 ad. ♂s and 1 juv ♂; April and May.
Okinawashima: Numerous specimens (♂, ♀ and juv.) obtained during April, May and June "Common"

The numerous specimens, 19 in all, from the Okinawa group (i. e., Izena, Yagachi and Okinawashima), contain a number of those in which the bill is much shorter than usual The culmen may be only 31mm. long and sometimes even 28mm, whereas in Hondo specimens it rarely, if ever, falls short of 35mm In comparison with Hondo specimens I further notice that the wing is on the average slightly shorter, that the general coloration of plumage is somewhat duller, that the dingy color of breast in immature birds is much darker and that the reddish of the lower mandible in females is of a deeper red tone

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All the numerous specimens from Tanegashima and Amami-Ōshima except two from the latter island, the single male from Kikaigashima and one of the two specimens from Okino-Erabushima may be said to agree well with Hondo specimens. The three examples excepted above, as well as the two from Tokunoshima, seem to agree rather with the Okinawa birds. So that, if the latter be regarded as separable, the Okinawa race seems to merge into that inhabiting Japan proper in Amami-Ōshima and in the islands between it and Okinawashima.

The following measurements were taken of the specimens from the Okinawa group :

Locality.	Date.	Sex.	Culmen.	Wing.
Izena	April 23... ...	Ad. ♂	31 mm.	71 mm.
„	May 9... ...	„ „	31 „	71 „
„	April 23... ...	„ „	34 „	71 „
Yagachi	„ 26... ...	„ „	37 „	72 „
„	May 1... ...	Juv. ♂	28 „	65 „
„	April 30... ...	„ „	28 „	—
„	May 1... ...	„ „	29 „	—
Nishi-haromajiro (Okinawashima)	June 1... ...	Ad. ♂	35 „	69 „
„ „	„ „... ...	„ „	31 „	71 „
Naha, „	April 12... ...	„ „	39 „	70 „
„ „	„ 14... ...	„ „	40 „	70 „
„ „	May 1... ...	„ „	40 „	73 „
„ „	April 14... ...	Ad. ♀	39 „	71 „
„ „	„ 23... ...	„ „	39 „	70 „
„ „	„ 12... ...	„ „	39 „	74 „
Orinamura, „	„ 29... ...	„ „	37 „	71 „
Cushichan, „	May 4... ...	„ „	36 „	70 „
Onnadake, „	„ 13... ...	„ „	36 „	72 „
Kamagusuku, „	„ 17... ...	„ „	38 „	70 „

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70. Merops ornatus Lath.

(Hachikui)

A single specimen, probably an adult male, was shot July 9 on the sea-coast at Nishihara in Miyakojima. This is the first specimen of the species obtained in the Japanese Empire.

71. Ninox scutulata (Raffles).

(Awobazuku).

Jamami: 1 ♀; July 26.

Okinawashima: 1 ♂; May 13, on the Onnadake.

Ishigaki: 5 specimens (♂ & ♀); early in June.

Yonakuni: 3 specimens (♂ & ♀); July 14 and 16. One of the three is from Aragusuku.

72. Scops semitorques (T. & S.)

(Ō-Konohazuku).

One adult ♂ and two young ♂s captured on the Mountain Nagodake in Okinawa-shima; May 8 and 12.

73. Scops elegans (Cassin).

(Riukiu-Konohazuku)

Amami-Ōshima: 1 ♀; Nishi-Nakamura, Nov. 20.

Ishigaki: 1 ♂ and 2 ♀s; on the mountains Omotodake and Kawara-yama, May 31 and early in June.

74. Scops scops japonicus (T. & S.).

(Konohazuku)

Okinawashima: 1 ♂; Aug. 9.

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75. Falco tinnunculus japonicus T. & S.
(Magusodaka).

Tanegashima : one female specimen ; Nov. 18.

76. Pandion haliætus (L.).
(Misago).

Tanegashima : 1 ♂ ; Nov. 4.
Amami-Ōshima : 1 ♂ ; Asatomura, Dec. 12.

77. Butastur indicus (Gm.).
(Sashiba).

Yakushima : 1 ♀ ; Awamura, Oct. 25.
Amami-Ōshima : 1 ♂ and 4 ♀ ; Nov. and Dec.

78. Milvus ater melanotis (T. & S.).
(Tombi).

Tanegashima : 1 ♂ ; Nov. 18

79. Haliætus pelagicus (Pall.).
(Ōwashi).

Amami-Ōshima : A ♂, shot by Mr. T. Izumi on the mountain Ogami, Jan. 8, 1905.

80. Buteo vulgaris Leach.
(Nosuri).

Amami-Ōshima : 1 ♂ ; Sumiyo, Dec. 14.

81. Accipiter nisus (L.).
(Haitaka).

Tanegashima : 1 ♀ ; Nov. 14.

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82. Accipiter gularis (T. & S.).

(Essai, Tsumi).

Amami-Ōshima: 2 ♂s, 2 ♀s and 1 juv. ♂; Nishinakamamura, Nov. and Dec.

Ishigaki: 3 ♂s; May and June, on Omotodake.

83. Spilornis pallidus Walden.

(Kammuri-washi).

This is the first record of this species from the Japanese territory. Two males were obtained in Iriomote, as follows:

O.C. No.	Locality.	Date.	Sex.	Culmen.	Wing.	Tail.	Tarsus.
1611	Urauchi (Iriomote)...	June 19.	Ad ♂	38 mm.	345 mm.	222 mm.	71 mm.
1612	Sunobaruyama (Iriomote) ...	„ 16.	„ „	35 „	345 „	225 „	77 „

84. Phalacrocorax capillatus (T. & S.).

(Shimatsu).

Tanegashima: 2 ♀s; Nov. 21.

85. Phoyx manillensis (Meyen).

(Murasakisagi).

Ishigaki: 2 ♀s; Hiratamura, June 5 and 8. Specimens from the same island exist in the Sci. Coll. Museum also. A comparison with authentic specimens of the species is yet to be done.

86. Garzetta garzetta (L.).

(Shirasagi).

Okinawashima: 1 ♂; April 19.

Miyakoshima: 1 ♂; July 9, on the sea-coast.

Iriomote: 1 juv. ♀; June 16.

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87. Bubulcus coromandus (Bodd.).

(Shōjōsagi)

Ishigaki: 1 ♂ and 1 ♀; June 4, on Omotodake.

Iriomote: 2 specimens; June 17, at Nakama

88. Demiegretta ringeri Stejn.

(Kurosagi)

Tanegashima: 1 ♀; Nov. 27.

Amami-Oshima: 1 ♂ and 1 ♀; Nov. 29 and Dec. 1.

Ishigaki: 1 ♂; Aug. 2, in Naguramura.

Iriomote: 4 ♂; middle and end of June, at Kamihara and Sonai.

All specimens in the gray phase of plumage.

89. Gorsachius goisagi T.

(Misogoi).

Okinawashima: 1 ♂; April 13, at Naha.

I do not see any indication on the specimen that it represents *G. melanolophus*.

90. Butorides javanicus amurensis (Schrenck).

(Sasagoi).

Yakushima: 1 ♂; Miyanoura, Oct. 11.

Amami-Ōshima: 1 ♂ and 1 ♀; Dec. 8 and 26

91. Ardetta sinensis (Gm.).

(Yoshigoi)

Amami-Ōshima: 2 juv. ♂s; Dec. 9 and 21.

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92. Nannocnus ijimai SP. NOV.

(Riukiu-Yoshigoi).

Pl. XI.

In all eleven specimens of this species, which I consider to be new, were brought back from Yagachi, Okinawashima and Ishigaki. List and measurements given further on.

Characters —Of about the same size as *N. eurythmus*, but differs in all plumages from it by the dull reddish (instead of dark brown) of the primaries and secondaries. Lower end of tibia exposed for 13m m. or more.

Adult ♂. Entire upper parts, from head to tail, uniformly dull chestnut rufous. Entire wing similarly colored, but ochraceous on a part of the wing-coverts. Under-parts uniformly cinnamon rufous in general; paler towards the under tail-coverts; with some white on the sides of upper throat; some feathers on the sides of forebreast broadly striped with dark brown. Axillaries light ochraceous buff. Color of bill as in *N. eurythmus*. Iris yellow and feet dark yellow according to the collector's note.

Adult ♀. Different from the male. Upper-parts more dark-brownish; dusky brown on the head; tail-feathers dull chestnut rufous. Most wing-coverts with ochraceous-rufous, ochraceous and brown; primaries and secondaries dull chestnut rufous, with black shafts. Under-parts pale ochraceous buff; lighter towards the under tail-coverts; with spots and broad stripes except on the belly and under tail-coverts. Axillaries ashy buff.

Juv. ♂. Like the female, but the upper-parts more brown and with more ochraceous buffy spots on back and wing-coverts. Differs from the young of *N. eurythmus*, in wanting the chestnut-red on sides of head, on hind neck, on back and wing-coverts; in the much paler ochraceous color of the under parts; and in the dull brownish red of remiges and rectrices.

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List and measurements of the specimens.

O.C. No.	Locality.	Date.	Sex.	Culmen.	Wing.	Tail.	Tarsus.
1246	Yagachi	April 29.	Ad. ♂	51 mm.	146 mm.	46 mm.	49 mm.
1248	„	„ 30.	Ad. ♀	49 „	133 „	41 „	47 „
1262	Nago (Okinawashima) ...	May 14.	Ad. ♂	51 „	142 „	42 „	54 „
1242	Naha („) ...	April 19.	„ „	54 „	142 „	42 „	51 „
1247	„ („) ...	„ 13.	Ad. ♀	46 „	141 „	49 „	51 „
1241	Sashichi („) ...	May 14.	Ad. ♂	54 „	142 „	43 „	52 „
1245	Ishigakishima	„ 28.	„ „	55 „	143 „	42 „	52 „
1240	„	„ 31.	„ „	51 „	147 „	48 „	51 „
1243	„	„ 28.	„ „	56 „	142 „	44 „	55 „
1250	„	June 21.	Juv. ♂	53 „	135 „	40 „	50 „
1249	„	„ 12.	„ „	44 „	124 „	—	45 „

93. Dendrocygna javanica (Horsf.).

(Riukiugamo).

Iriomote : 3 ♂s and 1 ♀; middle and end of June, on the sea-coast at Nakama and on a rice-field at Hunauki.

94. Tadorna cornuta (S. G. Gm.).

(Tsukushigamo).

Ishigaki : 1 ♂; March 15, shot on a rice-field.

95. Spatula clypeata (L).

(Kuchigamo).

Tanegashima : 1 ♂ and 1 ♀; Nov. 28.

Okinawashima : 1 ♂ and 1 ♀, July 12 and Dec. 4, obtained in Naha.

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96. Anas boschas L.
(Magamo).

Tanegashima: 7 ♂s and ♀s; Nov. and Dec.
Amami-Ōshima: 1 ♂; Dec. 3.

97. Anas zonorhyncha Sw.
(Karugamo).

Tanegashima: 2 ♀s; Nov. and Dec.
Iheya: 1 ♀; May 16.
Iriomote: 1 ♂ and 1 ♀; June 17 at Nakama.

98. Mareca penelope (L.).
(Hidorigamo).

Tanegashima: 1 ♂, 1 ♀ and 1 juv; Nov. and Dec

99. Aix galericulata (L).
(Oshidori).

Tanegashima: 1 ♂ and 3 ♀; Nov. and Dec.
Okinawashima: 1 ♀; May 8, shot on a pond on a mountain in Kunchan.

100. Nettion crecca (L.).
(Kogamo).

Tanegashima: 5 ♂s end ♀s; Nov. and Dec.

101. Dafila acuta (L.).
(Onagagamo).

Tanegashima: 1 ♂; Nov. 28.

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102. Aythya fuligula (L.).

(Kinkurohajiro).

Yakushima : 2 ♀s ; Oct 25 and 27.

103. Aythya marila (L.).

(Suzugamo).

Tanegashima ; 1 ♀; Nov. 18

104. Sterna dougalli Mont.

(Beni-ajisashi).

Amami-Ōshima : 2 ♂; Aug. 23, at Komiya.
Jamami : 2 ♂s and 1 ♀; July 21 and 22.

The Jamami specimens seem to approach the form designated *S. dougalli gracilis* (Gld), but I am not in a position to make definite statements on the point.

105. Sterna melanauchen T.

(Eriguro-ajisashi).

Amami-Ōshima : 1 ♂; Aug. 23, at Komiya.
Jamami : Several ♂s and ♀s ; July 21 and 22.
Miyako : 9 ♂s and ♀s ; early in July.

106. Sterna bergii Licht.

(Ō-ajisashi).

Okinawashima : 1 ♂ ; April 12, at Naha
Ishigaki : Numerous ♂s and ♀s ; end of May and June 25, on the coast of Nagura.

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Probably the specimens belong to the form called by BANGS *S. bergii boreotis*.

107. Charadrius dominicus fulvus (GM.).

(Munaguro).

Kikaigashima : 3 specimens (♂ and ♀); on the sea-coast.
Okinawashima : 2 ♀s; April 25 and 18, at Naha.

108. Aegialitis alexandrina (L).

(Shirochidori).

Tanegashima : 6 ♂s and ♀s; Nov.
Yakushima : 3 ♀s; Oct.
Amami-Ōshima : 1 ♀; Sept. 8.
Kikaigashima : 1 ♀; Sept. 9.
Tokunoshima : 1 ♂ and 3 ♀; Aug. 12
Iheya : 1 ♂; May 15.
Izena : 3♂s and 1 ♀; April and May.
Jamami : 1 ♀; July 28.
Okinawashima : Numerous ♂s and ♀s; on the coast of Kunchan.
Ishigaki : Numerous ♂s and ♀s; June and July, on the coast of Arakawa.

109. Heteractitis brevipes (VIEILL.).

(Kiashi-shigi).

Tokunoshima : 1 ♀; Aug. 15.
Izena : 1♂ and 1♀; May 10 and 11.
Okinawa : Numerous ♂s and ♀s, April and May.
Ishigaki : 1 ♂, May 25, on rice-field.

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110. Rhyacophilus glareola (L.).
(Takabu-shigi).

Ishigaki: 1 ♀; Aug. 1, in Naguramura.

111. Tringoides hypoleucus L.
(Mushibami).

Tanegashima: 2 ♂s; Nov.
Yakushima: 1 ♀s, Oct. 29.
Amami-Ōshima: 3 ♂s and 1 ♀; Nov. and Dec.
Kikaigashima: 1 ♀; Sept. 12.
Izena: 1 ♂ and 1 ♀; April 22 and May 12.
Yagachi: 1 ♂ and 1 ♀; April 26.
Okinawashima: 3 (♂ and ♀) specimens; May 8.

112. Arenaria interpres (L.).
(Kyō-jō).

Tanegashima: 3 (♂ and ♀) specimens; end of Nov.
Izena: 1 ♂ and 1 ♀; May 11.
Ishigaki: 1 ♂; May 27.

113. Limonites ruficollis (Pall.).
(Tōnen).

Ishigaki: 1 ♀; Aug. 2, in Naguramura.

114. Heteropygia acuminata (Horsf.).
(Uzura-shigi).

Ishigaki: 3 ♀s; May 27.

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115. Rostratula capensis (L.).
(Tamashigi).

Tanegashima : 1 ♂; Nov. 30.
Yagachi : 1 ♀; April 26.

116. Gallinago megala (Sw.).
(Chūshigi).

Okinawashima : 1 ♂ and 1 ♀; April 24, at Naha.

117. Gallinago gallinago (L.).
(Tashigi).

Amami-Ōshima : 1 ♂; Dec 6.

118. Scolopax rusticula L.
(Yamashigi).

Tanegashima : 1 ♂; Nov. 18.
Yakushima : 1 specimens; July 26.
Amami-Ōshima : 3 specimens; Nov. and Dec.

119. Turnix taigoor (Sykes).
(Mifu-uzura).

Okino-Erabushima : Often observed by the collectors on this island.
Okinawashima : Numerous specimens (♂, ♀ and juv) captured in Naha in April and May.
Miyakoshima : 2 ♂s; July 13 and 15, at Hera.
Ishigaki : 1 ♀; May 25, on Kawarayama.

120. Porzana pusilla (Pall.).
(Himekuina).

Ishigaki : 1 ♂; June 2, in Naguramura.

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121. Limnobænus phæopygus (Stejn.).

(Riukiu-Hikuina)

Yakushima: 1 ♂; Dec. 10.
Amami-Ōshima: 4 specimens (♂ and ♀); Nov. and Dec.
Okinawashima: 1 ♂; April 14, in Naha.

All the specimens slightly darker throughout, when compared with *L. fusca* obtained in Hondo; under tail-coverts blacker; belly mostly (not always) likewise darker and with more distinct and more numerous white bars. None of the specimens show white spots on the outer web of 1st primary. It occurs to me doubtful if the specific distinction between *phæopygus* and *fuscus* can be held up in all cases.

122. Gallicrex cinerea (Gm.).

A single specimen obtained June 18 in Kohamajima, a small island between Ishigaki and Iriomote. Mr. Osada, the collector, states that he met with many individuals of the species on a rice-field but could secure only one.

The specimen in hand is sexed ♀ but agrees in the coloration of plumage as well as in measurements tolerably well with the description of the female of *Gallicrex cinerea* as stands in the Brit. Mus. Catalogue, vol. XXIII. In that species the female should be much smaller than the male. Compared with the two young males of *G. cinerea* at my disposal, the specimens is decidedly smaller and therefore can not be a young, much less an adult, male of the species. I am greatly inclined to think that the sexing of the specimen is an error and that I have before me a female *G. cinerea*, either young or adult.

The collector notes that the bill was "grayish yellow," the iris yellow, feet dark blue and claws reddish brown.

Measurements: Culmen with frontal shield 35mm., wing 158mm., tail 66 mm, tarsus 57mm. and middle toe with claw 80 mm.

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123. Gallinula chloropus orientalis (Horsf.).

(Ban).

Amami-Ōshima and Okinawashima: Numerous specimens as in the list given below.

Ishigaki: 1 ♀; July 3.

Amami-Ōshima specimens.

Date.	Sex.	Culmen with frontal plate.	Wing.	Tail.	Tarsus.
May	Ad. ♂	41 mm.	166 mm.	73 mm.	46 mm.
Nov. 28	,, ,,	36 ,,	172 ,,	75 ,,	47 ,,
,, ,, ...	,, ,,	38 ,,	167 ,,	75 ,,	47 ,,
Dec. 5	,, ,,	36 ,,	174 ,,	75 ,,	50 ,,
,, ,, ...	,, ,,	37 ,,	165 ,,	75 ,,	49 ,,
,, 8	,, ,,	37 ,,	168 ,,	76 ,,	50 ,,
,, ,, ...	,, ,,	36 ,,	167 ,,	79 ,,	48 ,,
,, 16	,, ,,	31 ,,	158 ,,	71 ,,	44 ,,
,, 21	,, ,,	31 ,,	155 ,,	76 ,,	43 ,,
,, 23	,, ,,	35 ,,	172 ,,	76 ,,	48 ,,
,, 26	,, ,,	32 ,,	156 ,,	74 ,,	45 ,,
,, 8	Ad. ♀	32 ,,	158 ,,	68 ,,	47 ,,
,, ,, ...	,, ,,	31 ,,	163 ,,	65 ,,	45 ,,
,, ,, ...	,, ,,	30 ,,	152 ,,	65 ,,	45 ,,
,, ,, ...	,, ,,	33 ,,	158 ,,	64 ,,	46 ,,
,, ,, ...	,, ,,	38 ,,	172 ,,	70 ,,	50 ,,
,, ,, ...	,, ,,	36 ,,	170 ,,	70 ,,	48 ,,
,, 9	,, ,,	36 ,,	169 ,,	76 ,,	48 ,,
,, 15	,, ,,	33 ,,	175 ,,	76 ,,	53 ,,
,, 17	,, ,,	33 ,,	167 ,,	67 ,,	50 ,,
,, 19	,, ,,	34 ,,	162 ,,	76 ,,	49 ,,
,, 23	,, ,,	32 ,,	165 ,,	65 ,,	50 ,,
,, 26	,, ,,	32 ,,	150 ,,	60 ,,	46 ,,
,, 28	,, ,,	—	152 ,,	69 ,,	47 ,,
Nov. 28	,, ,,	33 ,,	166 ,,	67 ,,	46 ,,

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Okinawashima specimens.

Date.	Sex.	Culmen with frontal plate.	Wing.	Tail.	Tarsus.
April 14	Ad. ♂	43 mm.	—	69 mm.	50 mm.
„ 19	„ „	43 „	154 mm.	68 „	46 „
„ 10	Ad. ♀	34 „	156 „	36 „	59 „
„ 12	„ „	32 „	152 „	39 „	62 „
„ 16	„ „	35 „	148 „	44 „	68 „

124. Podiceps minor (Gm.).

(Kaitsumuri).

Amami-Ōshima: 1 ♀; Dec. 8, near Sumiyo.

Table of birds known at present from the various islands and island-groups situated in a chain between Kiushiu and Formosa.

Remarks.—In the following table the names of birds are arranged in alphabetical order. The numerals in parenthesis show the current number used in the text of this report. The names without that reference number refer to species not represented in the present Owston collection. The mark + indicates specimen or specimens present in the collection; ○, known before but not present in the collection; and ⊕, known before and present also in the collection. For many species the locality had been given by authors as simply "Loochoo Is."; hence, the last column in the table. It may here be mentioned that the Loochoo Islands comprise the island-groups of Okinawa (of which Okinawashima is the largest island), Miyako, Ishigaki and Iriomote, and the island of Yonakuni.

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	Tanegashima.	Yakushima.	Amami-Ōshima.	Kikaigashima.	Tokunoshima.	Okino-Erabushima.	The Okinawa group.	The Miyako group.	The Ishigaki group.	The Iriomote group.	Yonakunishima.	Loochoo Is.
Accipiter gularis (82)			+				○		⊕			
„ nisus (81)	+											
Acrocephalus orientalis... ...							○					
Aegialitis alexandria (108) ...	+	+	+	+	+		⊕		⊕			
„ dubia												○
Aix gelericulata (99)	+						+					
Alauda japonica		+										
Alcedo ispida bengalensis (69)	+		+	+	+	+	⊕					○
Ampelis japonicus...							○					○
„ phœnicoptera												○
Anas boschas (96)...	+		+									
„ zonorhyncha (97)... ...	+						+		○	+		
Anous pullus...										○		
Anthus japonicus (46)	+											
„ maculatus									○			○
Ardea alba												○
„ „ modesta							○					
„ cinerea												○
„ grayi												○
„ javanica							○					
„ jugularis												○
„ sacra												○
Ardetta sinensis (91)			+									
Arenaria interpres (112) ...	+						+		⊕			
Aythya fuligula (102)		+										
„ marila (103)	+											
Bubulcus coromandus (87) ...									+	+		

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Bulweria bulweri										○?		
Butastur indicus (77)		+	+				○		○			○
Buteo vulgaris (80)			+									
Butorides javan. amurensis (90)		+	+									
Carpophaga ianthina (65) ...	+	+	+									○
,, jouyi (66)							+					○
Cettia cantans (27)	+	+	+				⊕		○			○
,, cantillans							○		○			
Chalcophaps indica (63) ...									⊕	+		
Charadrius dominicus fulvus (107)				+			⊕		+			○
Charadrius helveticus												○
,, minor							○					○
,, squatarola												○
Chelidon namiyei (56)			+		+		⊕					○
Cinclus pallasi (13)		+										
Cisticola brunniceps (28) ...							⊕	+	⊕	⊕		○
Coccothraustes coccothr. japonicus									○			
,, vulgaris (48) ...							⊕					
Columba ianthina							○					
,, intermedia												○
Coruus macrorhync. japonensis (35)	+	+					○					
,, ,, levaillanti (36)	+	+					+	+	○			○
,, ,, osai (37) ...							+		+	+		
Crex sepiaria									○	○		
Cuculus canorus							○					
,, kelungensis (67) ...									○			
Dafila acuta (101)	+											

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Demiegretta ringeri (88) ...	+		+						⊕	+		
Dendrocygna javanica (93) ...									+	⊕		○
Emberiza ciopsis (52)	+	+										
„ fuscata (53)	+											
„ personata (54) ...	+	+					○					○
„ spodocephala... ...									○			
„ variabilis (55) ...	+	+										
Eurystomus orientalis										○		○
Falco peregrinus										○		
„ tinnunculus jap. (75) ...	+											
Fringilla montifringilla... ...												○
„ spinus (49)							⊕					○
Fulica atra												○
Fuligula fuligula									○			
„ marila												○
Gallicrex cinerea (122)... ...										+		
Gallinago gallinago (117) ...			+						+			
„ megala (116)... ...							+					
Gallinula chloropus orientalis (123)			+				⊕		⊕			○
Garrulus japonicus (38)... ...		+										
„ lidthi			+									
Garzetta garzetta (86)							+	+		+		
Gecinus awokera (57)	+											
Geocichla major (2)			+									
„ varia (1)	+											
Gorsachius goisagi (89) ...							+					
„ melanolophus ...									+			

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Halcyon coromanda										○		○
„ „ rufa (68)			+			+	+		○	+		○
Haliaetus pelagicus (79) ...			+									○
Hemichelidon sibirica (19) ...		+										
Heteractitis brevipes (109) ...					+		+		⊕			○
Heteropygia acuminata (114)									+			
Hirundo rustica gutturalis ...									○			
Hypsipetes amaurotis (21) ...	+	+					⊕		+			○
„ squamiceps pryeri (22)			+				⊕		⊕	+		○
Ianthia cyanura							○					
Icoturus akahige (8)		+										
„ komadori (10)			+		+					○		○
„ namiyei (9)							⊕					
Iyngipicus kisnki nigreascens (60)		+	+				⊕					○
Lanius bucephalus (40)... ...	+	+	+						+			
„ lucionensis...												○
Larus cachinnans							○					
Limnobænus phæopygus (121)		+	+				+		○	○		
Limonites ruficollis (113) ...									+			
Locustella fasciolata (25) ...									+			
Mareca penelope (98)	+											
Megascops elegans...							○		○			○
Melodes calliope (11)	+	+								○		○
Mergus serrator							○					
Mercps ornatus (70)								+				
Merula celænops yakushimensis (7)		+										
„ fuscata (3)	+											

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Merula obscura (6)	+								○			
„ pallens							○					
„ pallida (4)	+	+	+				⊕		○			○
„ chrysolaus (5)	+						⊕		○			○
„ naumanni							○					○
Milvus ater melanotis (78) ...	+											
Monticola solitaria (12) ...	+	+	+	+	+		⊕		○			○
Motacilla boarula melanope (45)	+	+	+	+			⊕					○
„ lugens (44)	+	+							○			
„ sulphurea												○
„ taivana							○					
Nannocnus eurythmus									○			
„ ijimai (92)							+		+			
Nettion crecca (100)	+								○			○
Ninox scutulata (71)							⊕		⊕	○	+	
Numenius lineatus...												○
Nycticorax nycticorax												○
Ochthodromus mongolus ...									○			
Pandion haliætus (76)	+		+									
Parus ater pekinensis (30) ...		+										○
„ minor (31)			+		+		○					○
„ castaneoventris							○					
„ commixtus (32)			+		+		+		+	+		○
„ stejnegeri									○			
„ varius (33)	+	+	+				+					○
Passer montanus (50)	+	+										
„ „ saturatus (51)			+	+		+	⊕	+	⊕			

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Pericrocotus cantonensis? ...												○
„ tegimae (41) ...	+	+	+				⊕		⊕	+		○
Phalacrocorax capillatus (84)	+											
Phalaropus hyperboreus... ...												○
„ lobatus										○		
Phoyx manillensis (85)... ...									⊕			
Picus noguchii (58)							⊕					
„ owstoni (59)...			+									
Podiceps minor (124)			+									
Podiceps cristatus							○					
Poliomyias luteola (17)... ...	+											
Porzana pusilla (120)									+			
Pratincola maura (14)	+	+										
Puffinus leucomelas										○		
Pyrrhula griseiventris							○					
Regulus crist. orientalis (29)...	+											
Rhyacophicus glareola (110)									+			
Rostratula capensis (115) ...	+	+										
Ruticilla aurorea (15)	+	+										
Scolopax rusticola (118) ...	+	+	+									
Scops elegans (73)...			+				○		+			○
„ pryeri							○					○
„ scops japonicus (74) ...							+					
„ semitorques (72)... ...							⊕					○
Spatula clypeata (95)	+						+					
Sphenocercus medioximus (41)									⊕	+		
Sphenocercus permagnus (64)		+	+				⊕					○

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Spilornis pallidus (83)										+		
Sterna bergii (106)							+		+	○		○
„ „ boreotis									○			
„ dougalli (106)			+									○
„ „ gracilis... ...									○			
„ fuliginosa										○		○
„ „ crissalis ...										○		
„ melanauchen (105) ...			+				+	+	○			○
„ sinensis												○
„ stolida												○
Sturnia pyrrhogenys							+		⊕	○		
Sturnus cineraceus (42)... ...			+									
Sula sula...										○		
Tadorna cornuta (94)									+			
Tarsiger cyanurus (16) ...	+	+	+				○					○
Terpsiphone illex (20)			+	+			+		⊕	+		
Thalassidroma monorhis ...												○?
Thalassoaetus pelagicus ...												○
Treron sieboldi												○
Tringoides hypoleucus (111)	+	+	+	+			⊕		○			○
Troglodytes fumigatus (34) ...	+	+										
Turnix blakistoni							○					○
„ taigoor (119)						+	+	+	⊕			
Turtur orientalis (61)	+	+	+				⊕	+	+	+		○
Urophlexis ussuriana (26) ...		+										
Xanthopygia narcissina (18)...	+	+	+				+		+	+		
Zanthopygia owstoni									○			

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Zosterops japonica...										○		○
„ „ insularis (23)	+	+										
„ loochooensis (24) ...			+	+	+	+	⊕		⊕	+		○

Corrections.

On p. 177, 5th line from above, read "192 species" instead of "195 species."
„ „ „ , 9th „ „ „ , „ "128 forms" „ „ "131 forms."

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